

REMARKS/ARGUMENTS

Claims 12-15, 17, 19, 20-28, 30, and 32-41 are active. Claims 1, 2 and 8-11 have been withdrawn from consideration. The claim language has been revised for clarity. Claim 19 has been revised to refer to a specific amino acid sequence. Claim 30 has been revised to include the limitations of prior claim 31 and claim 31 has been cancelled.

The Examiner inquired about the residues identified in claims 40 and 41. These residues [51-55, 57] and [81, 84, 85, 90, 91], respectively, refer to the essential residues from motifs I and II specific to the FZR family, see the specification, page 5, lines 21-31 and SEQ ID NO: 2, and are shared by all the sequences of Fig. 1b namely,

For motif I: ⁵¹DRFIP-R⁵⁷

For motif II: ⁸⁰-Y—LL----FG⁹¹.

Accordingly, the Applicants do not believe that any new matter has been added.

The Applicants thank Examiner Collins for the courteous and helpful interview of January 14, 2005. It was suggested that claim 12 and its dependent claims be revised to rationalize and further clarify the claim language. The use of particular terms like CCS52Ms or Mt was discussed and enablement of claim 19 was reviewed. Further revisions to claims 30-39 which are directed to antisense nucleic acids were suggested. The Examiner also requested further information about the specific residues described by claims 40 and 41. In view of the above amendments, favorable consideration is requested.

Rejection—35 U.S.C. 112, first paragraph

Claims 15, 30 and 32-39 were rejected under 35 U.S.C. 112, first paragraph, as not being adequately described by the specification. These rejections are moot in view of the amendments above. Briefly, claim 15 has been revised using the same language which

appears in claim 12 and now clearly describes the claimed nucleic acid both by structure and by function. Claim 30 now incorporates the limitations of claim 31 which was not rejected. Claims 32-39 depend from claim 30. Accordingly, the Applicants respectfully request that this rejection now be withdrawn.

Rejection—35 U.S.C. 112, second paragraph

Claims 12-15, 17, 19-28 and 40-41 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for reciting “(SEQ ID NO: 2)” on the basis that the use of parenthesis did not unambiguously indicate whether or not SEQ ID NO: 2 limited the invention. The parentheses have been deleted. Accordingly, this rejection may now be withdrawn.

Rejection—35 U.S.C. 112, second paragraph

Claims 12-15, 17, 19-28 and 40-41 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for reciting “CCS52Ms” which was deemed not to unambiguously identify a particular polypeptide of *M. sativa*. Claim 12 has been amended to indicate that this protein is SEQ ID NO: 2.

Claim 19 was rejected as indefinite for the use of the term “CCS52Mt”. This rejection is moot since this term has now been defined by reference to a specific amino acid sequence.

The Examiner also raised a potential enablement issue with respect to the polypeptide of claim 19 since the specification does not exemplify the activity of this polypeptide. The specification exemplifies the activity of the polypeptide of SEQ ID NO: 2. The polypeptide of claim 19 differs from the polypeptide of SEQ ID NO: 2 by only two amino acid residues (R16G and V141I). These substitutions are unlikely to be involved in the activity of the

polypeptide since they are not located in conserved regions. In particular, they are not located in one of the seven domains with repeated WD40 motifs, and more particularly, not located in the latter domain VII comprising a potential binding site for the mitotic cyclins.

Degradation of mitotic cyclones by the FZR proteins is necessary to inhibit mitosis and to induce endoreplication. Accordingly, the Applicants respectfully submit that the polypeptide of claim 19 is adequately enabled.

Allowable Subject Matter

The Applicants thank Examiner Collins for indicating that the subject matter of claim 31 is otherwise allowable.

CONCLUSION

In view of the above amendments and remarks, the Applicants respectfully submit that this application is now in condition for allowance. Early notification to that effect is earnestly solicited.

Respectfully submitted,

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